#### PATENT COOPERATION TREATY

Translation From the INTERNATIONAL SEARCHING AUTHORITY ľo: **PCT** WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) Applicant's or agent's file reference FOR FURTIFER ACTION P2158 PCT See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/CH2004/000247 23.04.2004 24.04.2003 International Patent Classification (IPC) or both national classification and IPC Applicant UTISOL TECHNOLOGIES AG This opinion contains indications relating to the following items: Box No. 1 Basis of the opinion Box No. 11 Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Lack of unity of invention Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application 2. **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. 3. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA/EP Authorized officer Facsimile No. Telephone No.

International application No.
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| Box | No. I         | Basis of this opinion  |
|-----|---------------|--|
| ۱.  | With<br>filed | regard to the language, this opinion has been established on the basis of the international application in the language in which it was unless otherwise indicated under this item.  |
|     |               | This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under   |
|     |               | Rule 12.3 and 23.1(b)).  |
| 2.  | With          | regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed ation, this opinion has been established on the basis of:  |
|     | a.            | type of material   |
|     |               | a sequence listing   |
| İ   |               | table(s) related to the sequence listing   |
|     | b.            | format of material   |
|     |               | in written format  |
|     |               | in computer readable form  |
|     | c.            | time of filing/furnishing  |
|     |               | contained in the international application as filed.   |
| İ   |               | filed together with the international application in computer readable form.   |
|     |               | furnished subsequently to this Authority for the purposes of search.   |
| 3.  |               | In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished. |
| 4.  | Addi          | tional comments:   |
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| Во | x No. II    | Priority  |
|----|-------------|---|
| 1. | $\boxtimes$ | The following document has not yet been furnished:  |
|    |             | copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).   |
|    |             | translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).  |
|    |             | Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date in the claimed priority date.   |
| 2. |             | This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date. |
| 3. | Addi        | tional observations, if necessary:  |
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| Box No. V |             | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |        |                            |       |  |
|-----------|-------------|--|--------|----------------------------|-------|--|
| 1.        | Statement   |  |        |                            |       |  |
|           | Novelty (N) |  | Claims | 1-11 on certain conditions | YES   |  |
|           |             |  | Claims |                            | NO NO |  |
| Inventive |             | e step (IS)  | Claims | 5-8, 10, 11                | YES   |  |
|           |             |  | Claims | 1-4, 9                     | NO NO |  |
|           | Industria   | l applicability (IA)   | Clains | 1-11                       | YES   |  |
|           |             |  | Claims |                            | NO    |  |
|           |             |  |        |                            |       |  |

2. Citations and explanations:

The present report makes reference to the following search report citations (D); the same numbering will be used throughout the procedure.

- D1: DE 195 37 578 A (PASSAVANT WERKE) 10 April 1997 (1997-04-10)
- D2: DE 22 61 203 A (MECAFINA SA) 12 July 1973 (1973-07-12)
- D3: US-A-4 123 362 (MANSOURI HOSEIN) 31 October 1978 (1978-10-31)
- D4: DE 568 537 C (OLIVER UNITED FILTERS INC) 21 January 1933 (1933-01-21)
- D5: DE 11 98 751 B (STAMICARBON) 19 August 1965 (1965-08-19)

#### 1. Novelty

1.1 The application is concerned with a filtering device <a href="for">for</a> a sewage treatment plant. As emerges from the description, the drawings and the claims, this filter device is characterized by a separate chamber and by a certain configuration of its bottom.

However, these features are not related to the filter itself, rather to the sewage treatment plant as a whole (PCT Article 6).

D4 and D5 disclose cylindrical rotation filters having separate filter chambers, whose bottom is adapted to the filter contour—they are provided for

the treatment of sewage and therefore can also be

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

used **for** a basin according to claim 1. According to a strict interpretation of the current main claim, D4 and D5 must therefore be considered prejudicial to novelty (PCT Article 33(2)). What is evidently really meant is a water treatment or sewage treatment plant **with** a rotation filter having a horizontal axis of rotation disposed therein. Accordingly, claim 1 should be directed not to a filter device but to a plant of this kind.

1.2 Sewage treatment plants with separate filter chambers are already known from the prior art (see D1-D3, figures). However, none of these documents discloses a bottom contour which is adapted to the filter. Therefore, novelty exists (PCT Article 33(2)) on condition that claim 1 be clarified according to subsection 1.1 above.

#### 2. Inventive step

2.1 According to the description, adapting the bottom contour to the filter reduces the chamber volume, which saves cleaning fluid. However, this advantage as well as the separate execution of the filter chamber only make sense if the filter chamber is detachably connected to the main basin (see claim 5). Without this feature, the cleaning method claimed in claims 10 and 11 cannot be carried out.

According to current case law of the boards of appeal, a patent can only be granted on the basis of a claim which defines the scope of protection sought

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by indicating all **features essential** to implementation. Accordingly, an independent claim must contain all the technical features necessary for solving the problem on which the application is based (PCT Article 6).

In so far as an independent claim does not contain all essential features, it does not represent the definition of an invention and can only be interpreted as an insufficient description thereof.

In summary, the current definition of claim 1 embraces developments which do not solve the problem and/or which do not make possible the very advantages described in support of an inventive step. Thus the subject matter of claim 1 a priori (i.e. before the cited references are considered) cannot involve an inventive step (PCT Article 33(3)).

2.2 The problem to be solved can be considered that of simplifying filter cleaning in known sewage treatment plants and saving substantial amounts of cleaning fluid. The solution proposed in claim 1 in combination with dependent claim 5 is to equip a sewage treatment plant with an additional detachably connected filter chamber whose bottom fits the contour of a rotation filter inside it. Adapting the bottom to the filter reduces the empty space, so only the remaining space has to be filled with cleaning liquid. The detachable construction of the filter chamber makes in situ cleaning possible, as

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proposed in the corresponding method claim. The prior art neither discloses nor anticipates a method of this kind or a corresponding device. Therefore a combination of claim 1 and claim 5, as well as independent claim 10, involves an inventive step (PCT Article 33(3)).

#### 3. Industrial applicability

The industrial applicability is self-evident.